Claim Amendments

Please amend claims 1, 5, 9, and 15-20 as follows:

Listing of Claims

1. (currently amended) A water purification system for purifying wastewater with a two step pH increase configuration, comprising:

an ion exchange unit for removing both positive and negative ions from the wastewater;

a base dosing system provided in fluid communication with said ion exchange unit for raising a pH of the wastewater in a first step of said two stage pH increase configuration; and

a high-efficiency reverse osmosis system provided in fluid communication with said base dosing system for further removing ions from the wastewater and raising the pH of the wastewater in a second step of said two step pH increase configuration.

2. (original) The water purification system of claim 1 wherein said base dosing system comprises a base dispensing tank for containing a base solution and a dispensing device extending from said base dispensing tank for dispensing the base solution into the wastewater.

3. (original) The water purification system of claim 1 wherein said ion exchange unit comprises a tank and an ion exchange resin bed provided in said tank.

4. (original) The water purification system of claim 3 wherein said base dosing system comprises a base dispensing tank for containing a base solution and a dispensing device extending from said base dispensing tank for dispensing the base solution into the wastewater.

5. (currently amended) The water purification system of claim 1 wherein said high-efficiency reverse osmosis system comprises at least one first stage filter membrane and at least one second stage filter membrane ~~provided in fluid communication with said base dosing system~~.

6. (original) The water purification system of claim 5 wherein said base dosing system comprises a base dispensing tank for containing a base solution and a dispensing device extending from said base dispensing tank for dispensing the base solution into the wastewater.

7. (original) The water purification system of claim 5 wherein

said ion exchange unit comprises a tank and an ion exchange resin bed provided in said tank.

8. (original) The water purification system of claim 7 wherein said base dosing system comprises a base dispensing tank for containing a base solution and a dispensing device extending from said base dispensing tank for dispensing the base solution into the wastewater.

9. (currently amended) A water purification system for purifying wastewater with a two step pH increase configuration, comprising:

an ion exchange unit for removing both positive and negative ions from the wastewater;

a base dosing system ~~comprising at least three first stage membranes and a second stage membrane~~ provided in fluid communication with said ion exchange unit for raising a pH of the wastewater in a first step of said two step pH increase configuration; and

a high-efficiency reverse osmosis system comprising at least one first stage and at least one second stage filter

membranes provided in fluid communication with said base dosing system for further removing ions from the wastewater and further increasing said pH in a second step of said two step pH increase configuration;

wherein said base dosing system is in fluid communication with a fluid communication line connecting said ion exchange unit to said high-efficiency reverse osmosis system.

10. (original) The water purification system of claim 9 wherein said base dosing system comprises a base dispensing tank for containing a base solution and a dispensing device extending from said base dispensing tank for dispensing the base solution into the wastewater.

11. (original) The water purification system of claim 9 wherein said ion exchange unit comprises a tank and an ion exchange resin bed provided in said tank.

12. (original) The water purification system of claim 11 wherein said base dosing system comprises a base dispensing tank for containing a base solution and a dispensing device extending from said base dispensing tank for dispensing the base solution into

the wastewater.

13. (original) The water purification system of claim 11 further comprising a plurality of inlet nozzles provided above said ion exchange resin bed for distributing the wastewater onto said ion exchange resin bed and a plurality of outlet nozzles provided beneath said ion exchange resin bed for distributing the wastewater from said tank.

14. (original) The water purification system of claim 13 wherein said base dosing system comprises a base dispensing tank for containing a base solution and a dispensing device extending from said base dispensing tank for dispensing the base solution into the wastewater.

15. (currently amended) A method of purifying wastewater with a two step pH increase process, comprising the steps of:

providing an ion exchange unit for removing both negative and positive ions from a feed comprising said wastewater;

providing a high-efficiency reverse osmosis system in

fluid communication with said ion exchange unit;

distributing the wastewater through said ion exchange unit to produce a first effluent wastewater;

raising the pH of the first effluent wastewater in a first step of said two step pH increase process; and

raising the pH of the first effluent wastewater by producing a second effluent wastewater from the first effluent wastewater in a second step of said two step pH increase process by distributing the first effluent wastewater through ~~said~~ a high-efficiency reverse osmosis system.

16. (currently amended) The method of claim 15 wherein said raising the pH ~~of the water~~ in a first step comprises raising the pH ~~of the water~~ from a pH of about 3 to 4 to a pH of about 6 to 7.

17. (currently amended) The method of claim 16 wherein said raising the pH ~~of the water~~ in a second step comprises raising the pH ~~of the water~~ from said pH of about 6 to 7 to a pH of about 8.5 to 10.

18. (currently amended) The method of claim 15 wherein said raising the pH ~~of the wastewater~~ in a first step comprises:

providing an inlet line ~~between and~~ in fluid communication with and fluidly connecting said ion exchange unit ~~and~~ to said high-efficiency reverse osmosis system,

providing a base dosing system in fluid communication with said inlet line,

distributing the first effluent wastewater through said inlet line, and dispensing a base from said base dosing system into said inlet line.

19. (currently amended) The method of claim 18 wherein said raising the pH ~~of the water~~ in a first step comprises raising the pH ~~of the water~~ from a pH of about 3 to 4 to a pH of about 6 to 7.

20. (currently amended)The method of claim 19 wherein said raising the pH ~~of the water~~ in a second step comprises raising the pH ~~of the water~~ from said pH of about 6 to 7 to a pH of about

8.5 to 10.